

gical to apply the blister to the back, where it is known to operate more powerfully on the substance of the lungs, as well as more directly on the centre of nervous influence.

The question then is—not whether hooping-cough be a curable disease, but which is the most eligible of all the curative means within our reach. Surely those physicians who may first have an opportunity of contending with it in the epidemic form, will not neglect to settle this question by multiplied experiments and indubitable testimony. At present we fear that all is uncertain, and even incredible, unless to those who have seen with their own eyes, and therefore, in the favourite language of Bacon, “we note the subject as wanting.”

*Northumberland, June 7th, 1834.*

ART. VI. *Case of Ununited Fracture, successfully treated by Friction.* By ISAAC PARRISH, M. D. one of the Surgeons to the Wills' Hospital for the Relief of the Lame and Blind.

SINCE the principle of exciting inflammation in the surfaces of fractured portions of bone, has been so successfully illustrated by our distinguished countryman, Dr. PHYSICK, the subject of ununited fracture has received a large share of attention from surgeons both in this country and abroad. Several other methods of practice, besides the introduction of the seton, the plan originally proposed, have been supposed to be adapted to particular cases, and have been successfully executed.

The following case exhibits a rare instance of the practicability of effecting the process of agglutination without a resort to the knife or the seton, but simply by trituration of the fractured surfaces of the ununited bone upon each other. This practice would perhaps prove effectual only in a few instances; in the present case several circumstances concurred to render the result peculiarly favourable.—First. The humerus being the seat of fracture. Secondly. The unusual obliquity of the fractured surfaces. Thirdly. The excessive wasting and loss of muscular power in the limb. Fourthly. The robust state of the patient's constitution and his temperate habits.

CASE.—Samuel Sapp, a stout, athletic man, aged about twenty-seven years, from New Jersey, applied to my father, during the last summer, concerning an ununited fracture of the humerus. He stated

that on the 1st of March, 1833, while engaged in his occupation, as one of the deck-hands on board the steam-boat Trenton, he was dragged overboard by becoming entangled in the rope, and in attempting to save himself by seizing the railings, his left arm was fractured.

He immediately applied to a surgeon in a neighbouring town, who carefully adjusted the fragments, and placed the limb in splints; the injured parts being but slightly painful, the first dressings were allowed to remain undisturbed for about three weeks, when other splints were substituted, and continued on the limb, with occasional alterations, for three months. At the end of this period, finding no improvement, his physician advised him to seek further advice.

On removing the splints, the limb was found to be much reduced in size, its muscular power was obliterated, and its capillary circulation feeble. He was advised to lay aside the splints and bandages, to use the limb moderately, and to keep up a steady system of external frictions, and requested to return to the city in cool weather.

On his return in the autumn, no improvement was manifest; and by the advice of my father, he placed himself under the care of my friend, Dr. WILLIAM ASHMEAD, and myself.

On a careful examination of the parts, we found an unusual obliquity in the fractured portions, the surfaces exposed being not less than three inches in extent, the edges of these surfaces, the rounded extremities of the fragments, and the crevice separating the opposing surfaces of the fracture, could be distinctly traced by the fingers. This examination was rendered peculiarly satisfactory, in consequence of the emaciation and flaccidity of the limb.

Owing to the remarkable extent of the fracture, and the loss of muscular power in the arm, the fragments, which in a more vigorous state of the surrounding parts, might have been kept in apposition, were separated from each other to a greater or less extent, as they were influenced by the position of the limb. When the forearm was flexed upon the arm, in the usual attitude for fractured humerus, the surfaces of the fragments were separated throughout their whole extent, but more particularly at their upper portion—and it was only in one position that their apposition was effected.

The limb being placed in that position, which we found upon trial effected a perfect coaptation of the parts, the upper and lower portions of the broken bone were grasped by the hands, and a firm, gliding motion communicated, so that the surfaces could be felt rubbing upon each other. This process was continued for several minutes;

and the limb was then secured in this position by light dressings in an angular box—a piece of thin board being firmly bound over the seat of fracture.

This process was repeated for several successive mornings, and was performed by Dr. Ashmead or myself: the few first trials excited but little sensation in the fractured surfaces, though the force used was as great as we could command. In a few days, however, the patient began to feel pain, which increased at every repetition of the process, until it became acute. The fractured ends were less moveable, heat and action were reëstablished in the limb, and we were obliged to diminish the frequency and severity of the friction.

In about a month, bony union became evident at the lower extremity of the fracture, which proceeded rapidly, and so agglutinated the lower portion as to prevent the necessity of the box: shooting pains were frequently experienced in the limb, and any attempt to disturb it produced considerable suffering. Under these circumstances we declined interfering with the salutary operations of nature, which proceeded most happily. In about two months after the commencement of the practice, we had the satisfaction of observing that a firm bed of callous was thrown out over the whole surface of this extensive fracture.

The muscles soon acquired their accustomed volume and force, and the man has since been pursuing his laborious occupation.

*Philadelphia, 4th Mo. 1834.*

ART. VII. *A Case of Hypertrophy of the Mammæ.* By S. C. HUSTON, M. D. Resident Physician in the Philadelphia Alms-house.

AT the solicitation of my friends I am induced to publish the following case which fell under my personal charge. Even should no practical results accrue from its publication, to the scientific observer it will still be interesting as affording a curious instance of inordinate organic development.

Charlotte Russel, a coloured girl, had from early life been an inmate of the Philadelphia Alms-house. Of her early history nothing worth commemorating is related prior to the age of puberty. At this critical period when nature institutes a new series of actions in the system, and all the vital forces are augmented, the customary changes are represented to have taken place. Her left breast, however, was observed disproportionately to enlarge, and at the time of her removal,